Remarks/Arguments:

Claims 1-18 are pending. Claims 1-9 and claims 11-18 stand rejected.

Claim 10 has **not** been rejected by the Examiner.

Section 102 Rejections:

Claim 1-3, 5, 7 and 16 have been rejected as being anticipated by Bird. Applicants respectfully submit that this rejection is overcome for the reasons set forth below.

Claim 1 includes features which are not suggested by the cited reference, namely:

- the imaging device configured to **collect energy received by at least two of the plurality of energy sensing elements** in **one respective charge collection element,** through actuation of **one** of the switching elements.

Applicants note that FIG. 3 (for example) shows two energy sensing elements (shown as PADS), which provide energy for collection by one respective charge collection element (C11, C31, or C51) through actuation of a switching element (labeled as Qodd). This is described, for example, in the specification, at page 8, lines 19-23. Applicants respectfully submit that claim 1 explicitly recites that **at least two of the sensing elements (pixels or PADS) provide energy for collection to one charge collection element (C11, for example), through actuation of one switching element (Qodd switch, for example)**. Thus, when the Qodd switch is turned ON, the energies sensed by PAD 1 and PAD 2, as shown in FIG. 3, are simultaneously provided for collection by one charge collection element C11.

Bird, on the other hand, discloses in FIG. 4, individual pixels, for example P1 and P2, which sense energy and are **separately and individually** switched for collection by way of transistor 54 and transistor 52 (two separate switches). Each of these individual transistors is separately turned ON by activation of either column 30A or column 30B. **One column**, either column 30A or column 30B, is activated at any one time. When control line CSO is activated, CSO turns on the gates of transistors 54 and 52. However, transistors 52 and 54 are not turned ON at the same time; only one transistor 52 or 54 is turned ON, when either column 30A or column 30B is activated. The output of pixel P1 is then switched onto amplifier 40a and the output of pixel P2 is **separately and independently switched** onto amplifier 40b. Accordingly, Bird individually senses energy, **one pixel at any one time**. This energy is sensed by an amplifier, where the amplifier converts the sensed energy into a voltage.

Bird, therefore, does **not** suggest **collecting energy from** at least **two** of the plurality of **energy sensing elements**, into **one respective charge collection element,** when actuated by **one of the switching elements**. Bird does **not** switch energy from multiple pixels onto one charge collection element, upon actuation by one switch. Bird only switches one pixel onto one respective charge collection element.

Favorable reconsideration is respectfully requested for claim 1. Dependent claims 2-12 depend from claim 1 and are, therefore, not subject to rejection in view of the cited reference for at least the same reasons set forth for claim 1.

Dependent Claims 10-12:

Dependent claim 10 further limits claim 1 by reciting the following:

- the energy received by the **at least two** of the plurality of energy sensing elements is **collected in the one** respective charge collection element, **before the energy is converted to a voltage signal** . . .

As shown in FIG. 3, for example, and described in the specification at page 8, lines 19-20, Q4 is a source follower that converts the charge signal, collected on capacitor C11 and stored on capacitor C12, into a voltage signal. The voltage signal is then configured for read-out, as claimed.

Bird, on the other hand, provides the charge sensed by one pixel, for example P1 or P2, onto an individual amplifier, 40a or 40b, which is **individually used for converting the charge collected into a voltage signal**.

Bird does **not** disclose or suggest receiving energy from at least **two energy sensing elements,** which is **collected by one charge collection element,** before that energy is converted into a voltage signal. Favorable consideration is requested, separately, for dependent claim 10.

Although not the same, dependent claims 11 and 12 recite features similar to dependent claim 10. Claims 11 and 12 are, therefore, not subject to rejection in view of the cited reference for the same reasons set forth for dependent claim 10.

Independent Claim 16:

Although not the same, independent claim 16 includes features that are similar to claim 1. Independent claim 16 is, therefore, not subject to rejection in view of the cited reference for the same reasons set forth for claim 1.

Section 103 Rejections:

Claims 4, 6, 8-9, 11-12 and 17-18 have been rejected as being obvious in view of Bird. Applicants respectfully submit that claims 4, 6, 8-9 and 11-12 depend from claim 1, and claims 17-18 depend from claim 16. Therefore, these claims are not subject to rejection in view of the cited reference for at least the same reasons set forth for claim 1 and claim 16, respectively.

Claims 13-15 have been rejected as being obvious in view of Koishi and in view of Bird. Applicants respectfully submit that this rejection is overcome for the reasons set forth below.

Claim 13 includes features which are not suggested by the cited references, namely:

- a photocathode . . .
- a multi-channel plate . . . **and**
- an imaging device . . . configured to collect energy received by at least **two of the plurality of energy sensing elements in one respective**

charge collection element, through actuation of one of the switching elements . . .

Applicants submit that independent claim 13 includes features of the imaging device that are similar to features recited in claim 1.

Claim 13 includes features that are similar to features included in independent claim 1. These features are not disclosed by Bird, as discussed above.

Koishi does **not** supply any of the features included in claim 1 and missing from Bird.

Claim 13 is, therefore, not subject to rejection in view of the cited references for the same reasons set forth above with respect to claim 1.

Claims 14 and 15 depend from claim 13 and are, therefore, not subject to rejection in view of the cited references for at least the same reasons set forth for amended claim 1.

Dependent Claims 14, 15, 17 and 18:

Dependent claims 14, 15, 17 and 18 include features that are similar to features included in dependent claim 10, which has been discussed above.

Applicants respectfully submit that these dependent claims are not subject to rejection in view of the cited references for the same reasons set forth for claim 10. Favorable reconsideration is respectfully requested.

Conclusion

Claims 1-18 are in condition for allowance.

Respectfully submitted,

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